1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

SOMATIC CHARACTERS

142 Several physical characteristics of the Seri Indians are so conspicuous as to attract attention even at first sight. Perhaps the most striking is the noble stature and erect yet easy carriage; next in prominence is the dark skin-tint; a third is the breadth and depth of chest; another is the slenderness of limbs and disproportionately large size of extremities, especially the feet; still another is length and luxuriance of hair; and an impressive character is a peculiar movement in walking and running.

141 126 128 The mean stature of the adult Seri may be estimated at about 6 feet (1.835 meters) for the males, and 5 feet 8 inches (1.727 meters) or 5 feet 9 inches (1.73 meters) for the females, these estimates resting on visual comparisons between Caucasians of known stature and about forty adult Seri of both sexes at Costa Rica in 1894.[1] In several of the accompanying photomechanical reproductions (e. g., plates XIII, XVI, XIX, XXIII, and XXVIII) a unit figure, introduced partly for the encouragement of the individuals and groups but chiefly to afford a basis for approximate measurement, gives opportunity for test of the estimate, the figure measuring 5 feet 11 inches (1.80 meters) to 5 feet 11½ inches (1.812 meters), and weighing about 215 pounds in the costume shown, including hat and boots.[2] These pictures and some thirty unpublished photographs, like the observations on the ground, indicate that practically all of the fully adult males and several of the females overtop the Caucasian unit. The only definite measurement known is that of the youthful and apparently immature female skeleton examined by Dr Hrdlička, of which the dimensions indicate a stature (estimated by the method of Manouvrier) of about 5 feet 3⅞ inches (1.62 meters),[3] or 3½ inches above the female normal of 5 feet ¼ inch (1.53 meters) given by Topinard; but this considerable stature is, probably on account of the youth of the subject, much below the mean indicated by the ocular and photographic comparisons (it corresponds fairly with that of the Seri maiden represented in plate XXV, whose age was estimated at 18 years). Naturally this striking stature, especially that of the warriors, has been much exaggerated by casual observers; the typical warrior, El Mudo, depicted in plate XIX, is indeed commonly reckoned as a 7-footer, though his actual stature (diminished somewhat in the pictures by fearsome shrinking from the ordeal of photographing) can hardly exceed

[1] The average height and weight of the unit figure (that of the author) are about 5 feet 6½ inches and 200 pounds, respectively.

[2] Or about 1.8178 meters estimated by the method of Rollet (cf. The Races of Man, J. Deniker, London, 1900, p. 32).

[3] 1.620

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6 feet 3 inches (1.90 meters); while for centuries the folk have been reputed a tribe of giants. 141

The estimation of Seri stature is difficilitated by the impossibility of defining maturity; and the effort to determine whether particular individuals were adult brought out clear indications of slowness in reaching complete maturity, i. e., of the continuation of somatic growth throughout an exceptionally long term in proportion to other stages in the life of the individual. Thus, with scarcely an exception, the polypsous matrons were taller than the mean of 5 feet 9 inches, while the apparently adult maidens (with one exception) and the younger wives were below this mean; and in like manner the stature of the warriors varied approximately with appearance of age, all of the younger men falling below the mean, and all of the older (except Mashém) rising above it. The difficulty of estimation is further increased by the absence of age records and the impracticability of ascertaining and standardizing the habitually guarded expressions for relative age implied in the kinship terminology; so that the age determinations were roughly relative merely, and there was no means of fixing the absolute age of maturity, of puberty, of marriage, or of the assumption of manhood and womanhood howsoever defined. 141 145

Under the conditions, the determination of stature-range in the Seri rancheria at Costa Rica in 1894 was not only difficult but uncertain; yet in general terms it may be said that the women having two or more children—about twenty in number—were notably uniform in stature, ranging from about 5 feet 7½ inches (in the case of an aged and shrunken elderwoman) to 5 feet 11 inches; that the younger women were more variable; and that the warriors (seventeen in number), of whom only a part were apparently heads of families, were more variable still, though the variation, apart from that apparently correlated with age, was less than is customarily found among the exceptionally uniform Papago, and decidedly less than that seen among the Yaqui or the local Mexicans. 141

The Seri skin-tint is of the usual Amerindian bronze, save that it is exceptionally dark, with a decided tone of black. Essayed representations of the characteristic color appear in plates XVIII and XXIV; but the essays are little more satisfactory than the innumerable attempts at depicting the skin-color of the American aborigines that have gone before. Experienced observers of the native tribes may form an impression of the Seri color from the explanation that they are as much darker than the neighboring Papago as the Papago are darker than the average tribesmen about the Great lakes; the Papago themselves being as much darker than the southern plains or Pueblo folk as these are darker than those of the Lake region. The range in color seems to be slight; the variation among the 60 individuals of both sexes and all ages seen at Costa Rica was hardly perceptible, being less than that usually observed in a single family of any neighboring tribe; while the 142

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142 Mashém (aged about 50 years), who had a few gray strands about the
145 temples; but it may be significant that the hair of the tribal outlaw Kolusio, who has lived with white men for full three score years, is iron-gray. Kolusio's pelage is trimmed in Caucasian fashion; that of Mashém
[115] is cut off mid-length in a manner exciting comment, if not derision, on the part of his fellows and others, and resulting in his (Spanish)
[302] sobriquet, Pelado (literally, Peeled, or idiomatically, Shorn); but with few exceptions the hair is kept long as it can be made to grow, and receives careful attention to this end. Naturally the length is somewhat variable; in many cases it depends to or slightly below the waist, while in other cases it merely sweeps the shoulders; and in general it appears to increase in both length and luxuriance not only throughout adolescence, but up to late maturity, for the best pelages are presented by moderately aged persons, while none of the youths are so luxuriantly tressed as their elders. Not the slightest trace of baldness appears. The infantile pelage is short, brownish in color, soft or even silky, and inclined to curl toward the tips. It is not until the age of several months that the hair begins to acquire the adult character, and at least some children retain traces of the infantile pilary character up to 5 or even 10 years; and none of the children display such jet-black shock-heads as are frequently found among other tribes, whose adult pelage may nevertheless be much less luxuriant than that of the Seri. On the whole, it may be said that the Seri hair is luxuriant and vigorous beyond the aboriginal average, and that it, like various other somatic features, indicates a relatively late maturation in the life-history of the individual.

142 Both sexes are beardless. The female faces seen were entirely free of strong pilary growth; one or two of the warrior faces showed scattering hairs, and Mashém sported a feeble and downy but jet-black mustache with an exceptional number of scattered hairs about the chin; while Kolusio shaved regularly, and might, apparently, have grown moderately stiff but straggling mustaches and beard. Axillary hair seems to be wanting; pubic hair is said to be scanty; otherwise the bodies are practically hairless (more nearly so than those of average Caucasians).

The teeth are solid, close-set, and even, and impress the observer as large; they close with the upper incisors projecting slightly beyond the lower denture in the usual manner.

128 The skeletal characteristics of the Seri are known only from a single
14) specimen obtained in the course of the 1895 expedition in such manner as to establish the identification beyond shadow of question. This skeleton was submitted to Dr Aleš Hrdlička for measurement and discussion.[1]

In making his examination, Dr Hrdlička compared the unquestion-

[1] A separate cranium was obtained by the 1895 expedition, having been sought and picked up by a Mexican member of the party in verification of his account of the killing of one of the Seri; but, in view of the possibility of erroneous identification, this skull was not submitted in connection with

1: McGee E-5 (1894-1895):1898 NU31 Seri NU31

ably authentic cranium of the entire skeleton with two skulls preserved in the American Museum of Natural History, viz, No. 99/84, designated as a skull of a Tiburon mound-builder, and No. 99/85, labeled as having

the complete skeleton. Subsequently this specimen also was put in Dr Hrdlička's hands (at his request), and was kindly examined, with the results recorded in the following letter:

MARCH 29, 1898.

Professor W J McGee,
Bureau of American Ethnology, Washington, D. C.

DEAR SIR: The skull which you submitted to me for examination shows the following:

The skull is that of a male between 40 and 50 years of age. The facial parts and a portion of the left temporal bone are wanting; otherwise the specimen shows nothing pathologic. There are signs that the skull belonged to a very muscular individual. The occipital depressions, ridges, and protuberances are very marked, and the temporal ridges approach to within 1.7 cm. on the left and 2.3 cm. on the right of the sagittal suture. The whole skull is rather heavy and massive; thickness of parietal bones 4–6 mm.

The shape of the skull is unusual. The frontal region is rather broad (frontal diameter, minimum, 9.7; frontal diameter, maximum, 12.1 cm.), but quite flat and sloping. Frontal ridges wanting (broken away).

The sagittal region is elevated into a crest which begins 4 cm. posteriorly from the bregma, is most marked at the vertex, and proceeds in two tapering diverging crests to the lambdoid suture. The whole vertex region is considerably elevated and forms a blunt cone, which is particularly noticeable when the skull is viewed from the side.

The temporo-parietal regions are moderately convex and expanded anteriorly, but become flattened and gradually narrow toward the parietal bosses. The parietal bosses measure each 11 cm. along the coronal, but only 8.8 cm. along the lambdoid suture. The gradual tapering of the parietal regions from their middle backward continues on the occipital bone up to the inion, and gives the norma verticalis of the skull a peculiar appearance.

The occipital region as a whole, does not protrude much, as in true dolichocephals, but it shows a prominent broad crest, formed by the two superior semicircular lines and the region between them. The extreme occipital protuberance is pronounced and shows signs of strong muscular attachments. A small distance above the foramen magnum, on each side of the median line, is a very marked depression, surmounted by a small ridge.

Of the mastoids, the right has been broken off and the left is damaged, but they do not seem to have been of extraordinary size.

The base of the skull is fairly well preserved and shows the following characters: The basilar processes and the petrous portions of the temporal bones are more massive than usual. The glenoid fossæ are broad and of fair depth. The styloids are quite massive (right 0.7, left 0.9 cm. long). The foramen magnum is hexagonal in outline; it is 4.4 cm. long, 3.4 cm. wide; its plane is inclined backwards in such a way that its antero-posterior diameter prolonged would touch about the lower borders of the nasal aperture.

The cranial cavity can be well inspected through the opening caused by injury. The internal surface of the frontal bone shows but very few traces of brain impressions. There are several large impressions on each parietal bone, and deep, though rather small, fossæ for the extremities of the occipital lobes on the occipital bone. The superior border of the foramen ostbe shows in the middle a rounded notch about 2 mm. deep.

The serration of the sutures is throughout very simple.

Measures.—The glabello-occipital length and maximum width of the skull can not be accurately determined on account of injuries to the bones. They amount, respectively, to about 18.8 and 14 cm., giving the cephalic index of about 74.4 (moderate dolichocephaly). The basion-bregma height is 14.1 cm.; basion-vertex, 14.8 cm.; basion-obelion, 13.6 cm.; basion-lambda, 12.2 cm. The two more anterior of these measures characterize the skull as a rather high one. The two more posterior measures show the rapid downward slope of the posterior half of the sagittal region. The maximum circumference of the skull (above the ridges) is 52 cm.

The bregma-lambda arc measures 13.3, the lambda-opisthion arc 12.2 cm. Diameter between the asterions = 10.7 cm.

If the skull under examination is considered from a purely evolutionary standpoint, it must be pronounced to be in many points inferior to the average white and even to the majority of Indian crania. An anthropological identification of the specimen is difficult, for the reason that we are still very imperfectly acquainted with the craniology of the people of southwestern United States and northern Mexico. From what we know of the crania of the Pimas, and the extinct Santa Barbara, Santa Catalina, etc, Californians, it is possible to say that the individual whose skull is here reported upon may have belonged to a people physically related to either of these groups. The skull is very distinct from that of an Apache. The female Seri cranium examined by me in fact does not show certain of the peculiarities of this specimen; nevertheless it is very possible that both crania belonged to individuals of the same tribe.

ALES HRDLIČKA.

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been found in a shell mound at Tiburon, California; but, in view of the possible error in identification in these cases, the comparisons are omitted. Otherwise, Dr Hrdlička's determinations are as recorded in the following report (and his drawings of the anterior and left lateral aspects of the cranium are reproduced in figure 6):

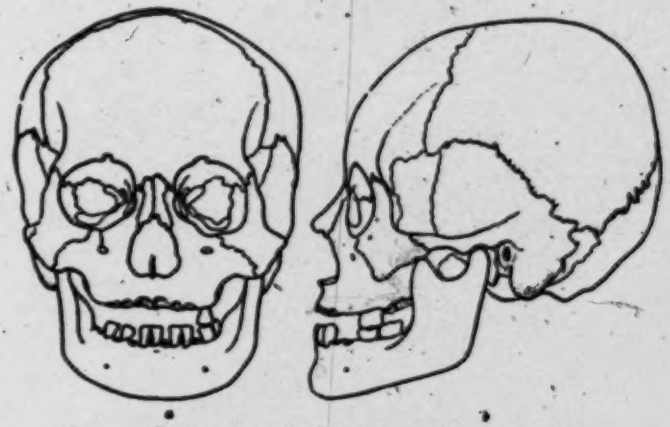

FIG. 6.—Anterior and left lateral aspects of Seri cranium.

REPORT ON AN EXAMINATION OF A SKELETON FROM SERILAND

[By Dr ALEŠ HRDLIČKA, Associate in Anthropology, Pathological Institute, New York]

The Skeleton

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All the bones of the skeleton are present, except the sternum, the coccyx, a few of the teeth, and a few of the small bones of the extremities.

It is a skeleton of a young adult, between 20 and 24 years of age, female. The age of the subject is indicated mainly by the unattached epiphyses of the long and some of the short bones, those epiphyses, namely, which are the last to ossify. The femininity of the subject is indicated by the generally slightly marked ridges, etc, of muscular attachment, and by the decidedly feminine character of the pelvis (light, well-spread ilia, broad subpubic arch) and of the skull (lack of supraorbital ridges, thin dental arches, small mastoids, etc).

There are no wounds or pathological conditions noticeable on the skeleton. Several peculiarities and anomalies are observable. They will be described with the parts they concern.

[128]
The measurements to follow are expressed in centimeters. The French anthropometric methods and nomenclature have been adopted.

The Skull

The skull is of fair size, and is symmetrical throughout, with the exception of a slight irregularity in the occipital region. All the sutures, with the exception of the basilar, open; nerve foramina all large; serrations rather simple; no intercalate bones of any kind.

Norma frontalis—Visage symmetrical. Forehead well arched, medium height.

1: McGee E- 5 (1894-1895):1898 NU31 Ser. NU31

Supraorbital ridges almost absent; glabella convex. Nasion depression medium. Orbits obliquely quadrilateral; their axes (internal inferior corner—internal superior corner) meet at ophryon. Spheno-maxillary fissure, lachrymal canal, and nerve foramina all above average in size. Nasal bones well bridged, very slightly concave; nasal aperture regular; no "gouttières"; turbinated bones well formed; septum wanting; spine 0.65 long, bifid at the end. Zygomæ of medium size and strength. Superior maxilla of medium size, well formed. Dental arches regular; no prognathism. Bone of lower jaw moderately strong; does not protrude anteriorly; conformation normal.

Norma basilis—Contour almost round. Whole base symmetrical, except as noted below; the middle structures appear shortened antero-posteriorly, slightly more on the left than on the right; basilo-vomeric angle rather acute (100°); foramina of the base all spacious; the petrobasilar suture is large (average diameter, 5 mm.) and is throughout pervious. Superior dental arch regular and of medium thickness. Dentition incomplete—right upper wisdom tooth not fully erupted; left lower wisdom tooth wanting entirely. Denture flat and regular; no teeth decayed. Both upper first incisors absent.[1] Teeth set regularly in socket and of medium size. Palatine arch symmetrical. Shape of palate normal. Posterior nasal foramina oblong. Styloids small, shell-like, flattened.

Norma occipitalis—The posterior part of the skull is somewhat flattened. The sides of the surface present a pentagonal outline with rounded corners, the apex corresponding to the sagittal suture, or obelion. There is a slight asymmetry, the right side being somewhat flattened. Exterior occipital protuberance not well marked.

Norma verticalis—Outline an irregular ovoid, wider posteriorly and more prominent on the left and posteriorly. Slight symmetrical depression of the parietals, beginning about 1 cm. and ending 5 or 6 cm. behind the coronal suture and extending laterally from the sagittal suture to the upper temporal ridges.

Norma lateralis—Outline ovoid, larger posteriorly. Pterions en H, of medium breadth. Temporal ridges not very distinct. Parietal bosses prominent.

	cc.
Skull capacity, Broca's method	1,545
Skull capacity, Flower's method	1,490
Antero-posterior diameter, maximum	16.3
Lateral diameter, maximum	14.4
Cephalic index, 88.3 = Brachycephalic.[2]	
Chin-bregma	21.2
Chin-ophryon	13.2
Alveolar point-ophryon	8.6
Bizygomatic breadth, maximum	13.0
Facial index	98.5
Superior facial index (Broca's), 66.1 = Mesomene.	
Height of nose aperture	5.4
Breadth of nose aperture	2.65
Nasal index, 49.0 = Mesorhine.	
Mean height of orbits	3.80
Mean breadth of orbits	3.95

[1] Both these incisors were apparently lost at the same time, not from general laxity, and some years previous to the death of the individual, as the sockets appear exactly alike, bear no signs of violence, and are almost filled up with cancellous tissue (some religious or social rite?).

[2] If allowance is made for the effects of flattening of the occipital on the long diameter, and hence on the index, of a skull, it becomes apparent that the true index of this skull is probably of a low brachycephalic, or, at least, of mesocephalic order. It is very doubtful if the deformity is intentional; its moderate extent and the total lack of signs of counter-compression would indicate with more probability that the deformity might have been produced by the individual lying, when an infant, by compulsion or habit, on something hard, probably a board.

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Orbital index, 88.2—Mesoseme.	cm.
Mean depth of orbits	4.6
Dacryon to dacryon	2.3
Frontal diameter, minimum	9.3
Frontal diameter, maximum (interstephanic)	11.4
Biauricular diameter[1]	12.3
Diameter through parietal bosses	14.3
Mastoid diameter	10.55
Distance from superior alveolar arch to inferior occipital ridge	14.35
Distance between supramastoid eminences	13.9
Length of basilar process (notch of vomer to basion)	2.95
Basion-bregma height	13.45
Basion-obelion height	? (obelion indistinct.)
Basion-ophryon	14.0
Basion-inion	9.1
Circumference, maximum	49.4
Basion-ophryon arc	1.8
Basion-bregma arc	12.3
Basion-inion arc	30.0
Basion-opisthion arc	25.5
Pterion-bregma arc	11.2
Arc external meatuses, over forehead	29.2
Arc external meatuses, over frontal bosses	30.4
Arc external meatuses, over bregma	34.0
Arc external meatuses, maximum	35.7
Arc external meatuses, over inion	23.6
Temporal ridges to sagittal suture (stephanions-bregma), (arc) mean	7.5
Lateral diameter of foramen magnum, maximum	3.75
Antero-posterior diameter of foramen magnum, maximum	3.60
Index of foramen magnum	78.4
Length of hard palate, maximum	4.6
Height of hard palate at first molars	1.55
Breadth of hard palate at first bicuspids	2.9
Breadth of hard palate at first molars	3.55
Breadth of hard palate at third molars	4.1
Height of posterior nares	3.1
Breadth of posterior nares	2.55
Index of posterior nares	82.2
Angle of mandibles	114°
Length of mandibular rami	9.55
Bigonion diameter of mandibles	8.95

The Vertebral Column

Cervical vertebræ—Number complete; characters normal. All cervical spinous processes bifid; vertebræ prominens well defined. All epiphyses absent.

	cm.
Transverse diameter of third cervical vertebra (between posterior tubercles of the pedicles), maximum	5.05
Antero-posterior diameter of third cervical vertebra (body-spinous process), maximum	4.20
Greatest lateral diameter of foramen, same vertebra	2.15

[1] The "biauricular" signifies the distance between points of the skull immediately above the commencement of the superior zygomatic border on the temporal.

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Greatest antero-posterior diameter of foramen, same vertebra	1.45
Height of body in center, same vertebra	.80

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Dorsal vertebræ—Number complete; characters absolutely normal. Resemblance to lumbar processes begins with tenth dorsal vertebra; a number of the epiphyses of the various processes either imperfectly united or dislocated; body epiphyses absent.

	mm.
Antero-posterior diameter of body of sixth dorsal vertebra, maximum	2.35
Lateral diameter of body of sixth dorsal vertebra, maximum	2.99
Height of body in center	1.67
Separation of transverse processes	5.45
Edge of upper articular processes-tip of spinous processes	5.50
Breadth of foramen, maximum	1.60
Length of foramen, maximum	1.50

Lumbar vertebræ—Number complete; characters absolutely normal. Only disk epiphyses detached.

	mm.
Antero-posterior diameter of body, maximum	2.12
Antero-posterior diameter of whole vertebra, maximum	7.10
Lateral diameter of body, maximum	4.55
Lateral diameter of transverse processes, maximum	7.10
Height of articular processes, maximum	4.35
Height of body in center, maximum	2.20
Antero-posterior diameter of canal, maximum	1.50
Lateral diameter of canal, maximum	2.10

The Sacrum

Aspect normal with the following exception: There are distinct intervertebral disks between the different segments (5 segments); there are deep lateral incisures in places where the lateral processes unite, and the fourth and fifth segments are entirely separated (in one piece) from the upper three (four small spots of consolidation along the posterior border of the articulation are visible). The articular processes of the first and second sacral segments are similar in form to the lumbar, and form open articulations. There is a large foramen situated below the spinous processes of the first and third segment, and a smaller beneath the second. Coccyx absent. Curvature medium.

	mm.
Breadth of the sacrum, maximum	10.5
Height of the sacrum, maximum	11.2
Index of the sacrum	93.7

The Thoracic Cage

Aspect of ribs normal. Strength medium. Sternum absent.

Length second right rib (arc)	21.6
Long diameter second right rib	12.5
Maximum height of the curve	7.2
Length ninth right rib (arc)	28.6
Long diameter ninth right rib	18.7
Maximum height of curve	8.45

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

Bones of the Upper Limbs

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Clavicles—Form normal, slender; epiphyses united. Length, maximum, 13.5. Muscular attachments of slight prominence.

Scapulæ—Form normal, spine directed somewhat more upward than is usual; whole bone light and slender; acromial epiphysis absent.

Height (middle of glenoid fossa–tip of inferior angle)	12.0
Breadth (middle of glenoid point, maximum)	8.7

Humeri—Form normal; bone slender; head-epiphyses not united; left head perforated by large oval foramen from coronoid to olecranon fossæ (8 mm. by 4½ mm.)

Length of left humerus (with epiphysis)	31.3
Length of right humerus (with epiphysis)	31.0

Ulnæ and radii—Form normal; bones slender; lower epiphyses ununited.

Length of left radius (head and end of styloid)	24.1
Length of left ulna (olecranon-styloid)	25.8

Metacarpus, carpus, and phalanges—Nothing special.

Bones of the Pelvis and Lower Limbs

All the bones of the pelvis and lower limbs of normal shape and medium size. Pelvis apparently that of a female (subpubic angle 109°). Bones well united, all traces of the union in acetabulum effaced. Epiphyses ununited except on the ischiatic protuberances, where bony union just begins. Above the fossæ acetabuli (3 mm. postero-superiorly from the uppermost edge of the fossa) there is in both acetabula an irregularly triangular depression of about 2 water-drops capacity (accessory tendon?).

Anterior to posterior-superior spine	23.7
Point of pubis to posterior-superior spine	15.8
Point of pubis to anterior-superior spine	12.7
Point of pubis to point of ischium	10.8
Bi-iliac diameter of whole bony pelvis (between internal iliac borders), maximum	21.0
Height of coxal bones (tuberosity of ischium to iliac border in this case without its epiphyses), maximum	19.4
Antero-posterior diameter of superior strait	11.8
Lateral diameter of superior strait	11.4
Oblique diameter of superior strait	11.8

Height of subject (determined after Manouvrier's method) about 1.620 m. (above the general average).

Femora—Lower epiphyses ununited. Muscular attachments, including linea aspera, but little prominent.

Length of femora (both condyles applied to base)	42.6
Inclination of neck to shaft	130°

Tibiæ—Both platycnemic. All the epiphyses ununited, especially the upper.

Antero-posterior diameter at center, maximum	2.5
Lateral diameter at center, maximum	1.62
Length (articular surface–tip of styloid)	35.6

$$\text{Femoro-tibial index } \left(\frac{\text{length of tibia} \times 100}{\text{length of femora}}\right) = 83.6$$

This index is 81 in the European, 82 in the negro, and 86 in the Bushman.[1]

Fibulæ—Length, 35.2. Epiphyses not yet united, particularly the upper.

Tarsal, metatarsal, and phalangial bones—Nothing special.

[1] Quain, Anatomy, 1890: Osteology, p. 122.

1: McGee E-5 (1894-1895)1898 NU31 Seri NU31

Résumé of the Peculiarities of the Skeleton

The nerve and blood-vessel foramina are generally large. This character and the platycnemic tibiæ indicate an ample musculature of the subject. 141

The height is above the general average for a woman, which, according to Topinard, is 1.53.

The petro-basilar fissures are large and visibly pervious. This condition is found occasionally; significance doubtful; it is more frequent in young subjects.

Platycnemic tibiæ—This is considered a simian character.[1] It was found first by Broca in 1868[2] on bones from Eyzies; it is associated with relative strength of the muscles of the leg; is very frequent among the characters found on bones from the epoch of polished stone in Europe.[3] J. Wyman found this character more accentuated than at Cro-Magnon or at Gibraltar on a third of the tibiæ from the mounds of the United States.[4]

Perforated humerus—Noticed first by Desmoulins, 1826, on the humeri of Guanches and Hottentots;[5] occurs with greatest frequency in the following peoples:[6]

	Per cent.
156 neolithic humeri from around Paris	31.6
97 humeri of African negroes	31.7
123 humeri of Guanches	35.6
80 humeri from the mounds of United States (J. Wyman)	31.2
32 humeri of Polynesians	34.3
30 humeri of altaic and American races	36.2

Summarily, Dr Hrdlička's special determinations confirm with the external observations on the Seri body; they indicate an exceptionally large stature, together with a notably well-developed and well-proportioned osseous framework, of the native American type, yet significantly approaching the Caucasian in several respects. It is especially noteworthy that the cranium is well formed and capacious, the precise measurements corroborating the external observation that the Seri head is of good absolute size, though relatively smaller (in comparison with height and weight) than that of some neighboring tribes of less stature—e. g., the Papago. It may be noted, too, that the imperfect ankylosis of the epiphyses, and various other skeletal features, are in accord with the inferences from the living body as to the slowness of attaining maturity. It may be noted further that the extraordinary development of the muscular attachments, especially in the masculine cranium, is quite in harmony with the habits of the tribe. 141 142 [145] [147]

The remaining somatic characteristics of the Seri are for the greater part of such sort as to be described by generalities and negatives. In general they correspond with those of typical American tribesmen and other peoples; and they do not exhibit striking peculiarities in proportion or structure. In the opposability of the thumb, the nonopposability of the hallux, and the independence of fingers and toes, the Seri hands and feet are developed quite up to, if not somewhat beyond, the 142 144

[1] Hervé[illegible] et Hervé, Précis d'Anthropologie, 1897, pp. 127, 2027.
[2] Bulletin de la Société d'Anthropologie, 1868.
[3] Hervé[illegible] et Hervé, op. cit., p. 113.
[4] Histoire Naturelle des Races Humaines, 1878, p. 304.
[5] Hervé[illegible] et Hervé, op. cit., p. 291.

2: Kroeber E-5 (1930)1931 NU31 Seri NU31

PHYSICAL TYPE

123 I had a calipers and rule with me on Tiburon Island, but no
141 stature rod. The Seri proved not to object to being measured, but in order to avoid the possibility of arousing prejudice, I had left the matter to the last; but for this, my series would have been longer. The results are given in the adjoining table. The somewhat unconventional finger and foot mensurements were taken because of the seeming length (more probably only unusual slenderness) of these members, but may give an approximate indication of the bodily height.

114 McGee is undoubtedly in error (p. 136) in estimating the average
141 height of Seri men at 1825 mm., of women between 1727 and 1750. I would deduct 100 mm. from these figures.[17] The Seri impressed me as less tall than the Mohave and Maricopa, who run about 1720 to 1740.[18] Hrdlička[19] found the following for the region: 53 American Pima, 1718; 50 Papago, 1709; 50 Yaqui, 1696; 30 Opata, 1670; 53 Mayo, 1673; 1 Seri, 1707. The Seri look taller than they are on account of their slenderness. This in turn might be due to preponder-
142 ant animal diet, general malnutrition, or congenital type. Certainly their calves, arms, and wrists are notably thin. The forearm bones in particular look long and exceptionally thin. The muscles are generally firm.

Head form, and nose index for adults, run close to those of other Sonoran tribes. Thus:

Cephalic index, 13 Seri men, women, and children, 80.4; Hrdlička,[20] 1 Seri, 81.3; 50 Mayo, 80.3; 31 Opata, 79.3; 49 Yaqui, 78.5. The Pima in the United States are longer headed, 78.1. Eleven Yaqui skulls averaged 75.7, equivalent to 77+ in the head by the usual estimate.

Nasal index, Seri, 4 men of 28 and up, 79.3, 4 women of 20 and up, 74.7, mean of total 8 adults, 77; Hrdlička, 1 Seri, 71.9; 53 Mayo, 80.2; 31 Opata, 81.1; 52 Yaqui, 78.9; 50 Papago, 79.8; 53 American Pima, 78.1; ten Kato, 78 Mohave, 82.

The Seri are slightly broader headed and narrower nosed than the others, but the difference does not seem significant, especially in view of the smallness of the Seri series.

141 Physiognomically the Seri are quite different both from the
142 Yaqui and Mayo and the American Pima and Papago; in fact con-

[Text continues on page 38]

[17] Hrdlička, in McGee, 143-147, gives the following on the skeleton of a Seri woman of age 20-24: Stature (computed by Manouvrier method), about 1420 mm.; indicated musculature, ample; cranial index (occipital deformation, probably unintentional), 88.8; nasal index, 49; skull capacity (Broca) 1545, (Flower) 1490 cc.

[18] Mohave, 1716; Yuma, 1722; Maricopa, 1749 (Hrdlička, in Putnam Anniversary Volume, 405–426, 1909); Maricopa, 1723 (ten Kate, Journ. Am. Ethnol. and Archaeol., 3:117-144, 1902).

[19] Putnam volume, as just cited; the Seri, in AA, 6:88, 1904.

[20] AA, 6:86-88, 1904. The nasal index means are given by Hrdlička. Neither means nor individual measurements are given for cephalic index, but the percentage distribution in index ranges of one point allows the calculation of an approximate mean.

Seri Measurements—1930

Estim. Age	Name	Length Head	Breadth Head	Length Face	Breadth Face	Length Nose	Breadth Nose	Cephalic Index	Nasal Index	Length[1] Middle Finger	Length[2] Foot
	MALES										
55	Santo Blanco	188	154	120	150	53	44	81.3	83.	74	242
42	Urbano Sanchez	156	150	124	145	56	42	89.6	75.	70	244
32	Chico Romero[3]	189	159	131	156	58	46	84.1	79.3	78	260
25	Luis Huicho	189	149	113	143	50	40	78.8	80.	75	240°
16	Pedro Comito	181	144	112	135	53	37	79.6		68	242
13	José Manuel Romero.. (son of Chico)	176	143	107	134	41	29	81.3		63	225
10	Juan Chavin	185	148	103	124	42	37	80.		57	192
	FEMALES										
42	Maria	182	163	124	141	55	43	78.6	78.2	74	225°
36	Loreta	187	147	126	144	61	46	78.6	75.4	76	236°
22	Maria Antonia	188	159	132	147	55	41	84.6	74.6	76	222°
20	Maria Ramona ..... (dtr. of Santo)	183	140	100	126	48	34	76.5	70.8	73	225
18	Martina Sanchez[4] ...	160	152	110	141	52	29	84.4		72	234°
13	Lupe	178	126	107	126	46	35	76.4		63	203
	Mean of 13 individuals							80.4			
	Mean of 5 adults								77.0		
	Mm. less than head breadth:										
	Av. 6 indiv. aet. 25+				4						
	Av. 7 indiv. aet. 22—				10						

[1] With calipers, tip to proximal crease at base of finger.
[2] With calipers, round of heel to round of end of big toe ("second toe longer, measured instead); foot unweighted, hanging free.
[3] Talbot, broadest, and heaviest in the group.
[4] Recorded as "Martin," but entered as female.

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2: Kroeber E-5 (1930)1931 NU31 Seri NU31

141 stitute a distinctive type, as shown by McGee's pictures of them, as well as mine (figs. 1-11). Physiognomic distinctiveness however
142 frequently fails to appear in measurements, at any rate the standard ones, and is often no doubt largely a matter of expression rather than of features. Expression must be determined by habitual feelings and behavior, and these in turn are heavily influenced by culture, which again, through subsistence, is interrelated with geographical environment. It is therefore expectable that a tribe like the Seri would look different from other populations. The one feature of face which impressed me as a Seri anatomical peculiarity was narrowness of lower jaw as compared with breadth in the region of the cheekbones. The reader's verdict from the photographs may or may not coincide with mine.